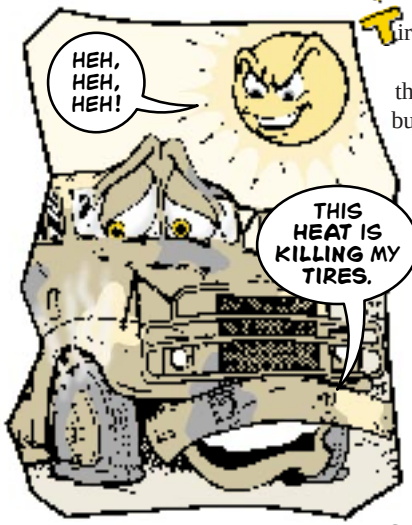
Reduce the Heat to Reduce the Wear



Tires suffer a double whammy in the desert. First, there's the increased heat. Then, there's the terrain. You can't change either, but you can reduce the damage they cause.

Operating under normal conditions, tires get hot as they flex under load. When operating in desert heat, the tires can't cool off, causing them to weaken.

Help save your tires by not overloading the vehicle. Less weight means less wear and damage. Sure, you've got to move a load, but keep in mind the capabilities of your trucks and trailers and their tires.

If you use a lower tire pressure for driving in the desert, drop your speed, too, to reduce tire wear from flexing. Some operator manuals list lower pressures to give the tires more flotation and traction in sand. Note that this can increase tire wear if vehicle speed is not lowered.

Here's an example for the M939-series trucks:

M939A1/A2 series (14.00 x R20)	M923	M925	M927	M928	M929	M930	M931	M932	M934	M936
HIGHWAY - front & rear										
Standard (psi)	60	60	60	60	60	60	60	60	60	80
Metric (kPa)	414	414	414	414	414	414	414	414	414	551
CROSS COUNTRY - front & rear										
Standard (psi)	35	35	35	35	35	35	35	35	35	35
Metric (kPa)	241	241	241	241	241	241	241	241	241	241
MUD, SAND and SNOW - front & rear										
Standard (psi)	25	25	25	25	25	25	25	25	25	25
Metric (kPa)	172	172	172	172	172	172	172	172	172	172
EMERGENCY - front & rear										
Standard (psi)	12	12	12	12	12	12	12	12	12	12
Metric (kPa)	83	83	83	83	83	83	83	83	83	83
ALL MODELS, SPARE	inflate to maximum highway pressure									

Trucks equipped with a central tire inflation system (CTIS) have a setting specifically for operating in sand, so use it.

'Course, once you leave the sand you'll need to increase tire pressure for driving on hard surfaces. Again, drivers of CTIS-equipped trucks just need to flip a switch. For everybody else, it's a tougher job—for safety reasons.

If you have to add more than 10–15 pounds to the tires, use the inflator gauge and hose, NSN 4910-00-441-8685, to do the job. That'll put 10 feet of hose between you, the tire and the wheel as you reinflate it. It lets you stay out of the danger zone in case the tire explodes or the wheel flies apart.

Avoiding Flats

Try not to run over cactus or brush. Many have spines and thorns that break off in tires—where you can't see them—and work their way through. You'll have more leaks than you know what to do with.

Take it easy in rocky, rough terrain. The sidewalls on radial tires are thinner than bias ply tires and rocks cut them to ribbons. Small emplacement excavators (SEEs) are especially prone to tire damage because they're right out there where the going is rough.

Tubeless tires lose air traveling through rocky terrain when the tire breaks loose from the rim. So check tire pressure more frequently when operating in the desert.

During stops, look for rocks caught between dual tires. Rocks between sidewalls rub holes in the tires.